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## REMARKS

### **I. Introduction**

In response to the pending Office Action, Applicants have amended claims 1, 5-7, 10-12, 15 and 16 in order to further clarify the intended subject matter of the present invention. No new matter has been added.

For the reasons set forth below, Applicants respectfully submit that all claims are in condition for allowance.

### **II. The Rejection Of Claims Under 35 U.S.C. § 103**

Claims 1-16 were rejected under 35 U.S.C. § 103 as being unpatentable over USP No. 6,563,891 to Eriksson in view of USP No. 5,513,387 to Saito. Applicants respectfully submit that, as amended, claims 1-16 are patentable over these references either taken alone or in combination with one another.

Each of the pending independent claims has been amended to clarify that the second variable attenuator has its attenuation value set on the basis of *a broadcast mode being utilized by the satellite terminal* to transmit data to the receiver. The broadcast mode of the satellite corresponds to a given transmission mode. As explained in paragraph [0023], in the given embodiment the satellite is capable of transmitting data in one of four modes (i.e., beacon mode, CONUS4 mode; CONUS3 mode; and point-to-point mode). For example, when operating in CONUS4 mode, the satellite transmits the data signal to substantially the entire continental US, while in point-to-point mode, the satellite transmits data to a selected number of cells.

Importantly, each of the broadcast modes have different transmission power levels associated therewith. Moreover, the receiving terminal of the present invention knows which broadcast mode the satellite will use to transmit data, prior to that data being received by the receiving terminal (for example, in a TDMA scheme, data is transmitted in a frame format, and the receiving terminal knows which broadcast mode is being utilized in a given data frame at least one frame in advance of receipt of the given data frame, *see*, paragraph [0023]). As a result, the attenuation value of the second variable attenuator can be adjusted prior to receipt of the data in the given broadcast mode such that the received signal can be maintained within a smaller, predefined dynamic range.

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Turning to the cited prior art, at a minimum, neither Eriksson nor Saito appear to disclose associating power levels to various broadcast modes to be utilized by the satellite to transmit data, and then adjusting the attenuation level of a second variable attenuator based on the power level associated with the given broadcast mode utilized to transmit the signal (so that the received signal to be input to an A/D converter is within a small, predefined range). *Eriksson merely discloses adjusting AGC values based on operating modes of the receiver. Eriksson does not disclose or suggest adjusting AGC values based on the broadcast mode utilized by the satellite to transmit the data as recited by the amended claims.* More specifically, as discussed for example in col. 8, line 56 – col. 9, line 8, Eriksson discloses adjusting the value of the amplifier based on whether the receiver was operating to decode traffic signals received on a first frequency, or whether the receiver was operating to make signal strength measurements on a second frequency. In other words, Eriksson discloses adjusting amplifier values based on the operation of the receiver. As stated, Eriksson does not disclose or suggest *adjusting AGC values based on the broadcast mode utilized by the satellite to transmit the data.* It is further noted that Saito neither discloses nor is relied upon as disclosing this feature.

Continuing, the pending rejection also asserts that Eriksson discloses both the recited first variable attenuator having an attenuation value set on the basis of a measured power level of a predetermined signal, and the second variable attenuator having an attenuation value set on the basis of the broadcast mode being utilized by the satellite to transmit data to the satellite terminal. Applicants respectfully submit that this conclusion is in error.

Specifically, even assuming *arguendo* that the amplifier 60, whose gain is controlled by signal processor 106, corresponded to the claimed second variable attenuator, Eriksson does not disclose another variable attenuator that could be deemed to correspond to the recited first variable attenuator. It would appear that variable gain amplifier 60 of Eriksson is being asserted as corresponding to both the first and second variable attenuators of the present invention. However, it does not. As noted above, the gain of amplifier 60 is controlled based on the operation of the receiver, and although variable amplifier 60 is illustrated as comprising multiple amplifiers, each of the amplifiers is utilized to control the gain resolution of the overall amplifier 60. Once again, assuming *arguendo* amplifier 60 corresponds to the claimed second variable attenuator, Eriksson neither discloses nor suggests any element corresponding to the first variable attenuator having an attenuation value set on the basis of a measured power level of a

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predetermined signal. If this rejection is to be maintained, the Examiner is respectfully requested to specifically identify which elements of Eriksson correspond to the first and second variable attenuators recited by the pending claims.

Finally, as recited by claims 6, 11 and 16, the broadcast mode being utilized to transmit the data to be received by the demodulator is known *a priori* such that the second variable attenuator can be programmed to the predetermined attenuation value corresponding to the given broadcast mode prior to said demodulator processing such data. It appears that Eriksson also fails to disclose this element of the present invention.

As each and every limitation must be disclosed or suggested by the cited prior art references in order to establish a prima facie case of obviousness (*see*, M.P.E.P § 2143.03), and the combination of Eriksson and Saito, at a minimum, fail to disclose the foregoing elements of the pending claims, it is respectfully submitted that the pending claims are patentable over the cited prior art.

It should also be recognized that the fact that the prior art could be modified so as to result in the combination defined by the claims at bar would not have made the modification obvious unless the prior art suggests the desirability of the modification. *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).

Indeed, recognizing after the fact that such a modification would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner*, 379 F.2d 1011, 154, USPQ 173 (CCPA 1967).

It is only Applicants' disclosure that discloses a satellite system which *adjusts the AGC values based on the broadcast mode utilized by the satellite to transmit the data to the satellite terminal*. Neither Eriksson nor Saito describe or suggest such a feature. Thus, the only motivation of record for the proposed modification of the device of Eriksson or Saito to arrive at the claimed invention is found in Applicants' disclosure which, of course, may not properly be relied upon to support the ultimate legal conclusion of obviousness under 35 U.S.C. §103. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 227 1 USPQ2d 1593 (Fed. Cir. 1987).

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### III. Request For Notice Of Allowance

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at 301-601-7252.

Respectfully submitted,

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